

REMARKS

This is intended as a full and complete response to the Final Office Action dated September 25, 2007, having a shortened statutory period for response set to expire on December 25, 2007. Please reconsider the claims pending in the application for reasons discussed below.

Claims 15-18 and 21-28 remain pending in the application and are shown above. Claims 11 - 13 have been cancelled by Applicant without prejudice. Claims 15-18 and 21-28 are rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 11-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chiang et al* (U.S. Pat. No. 5,817,572) in view of *Sugahara et al* (U.S. Pat. No. 5,989,998). Applicant has canceled claims 11-13 without prejudice.

Claims 15-18, 21 and 23-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chiang* ('572) in view of *Shu et al* (Patent Application No. 09/019,900, hereinafter "Shu"), on grounds that depositing an oxidized organosilane layer using methylsilanes and oxidizing gases as precursors would have been obvious at the time the invention was made. The Examiner asserts that Chiang teaches a method of forming interconnect structures on a substrate having a contact by depositing a first dielectric layer, forming an etch stop layer on the first dielectric layer, forming a second dielectric layer on the etch stop layer, forming a photoresist layer on the second dielectric layer, using the photoresist layer to form a contact hole in the second dielectric layer, and forming a third dielectric layer over the second dielectric layer, wherein the first and second dielectric layers may include silicon dioxide, silicon nitride, silicon oxynitrides, phosphosilicate glass, borophosphosilicate glass, fluoropolymer, parylene, polyimide, spin-on glass, or spin-on polymer. The Examiner further asserts that parylene and polyimide are known low dielectric constant materials. The Examiner acknowledges that Chiang fails to teach deposition of the low dielectric constant organosilane layer in a plasma enhanced process from a mixture comprising a methylsilane compound and an oxidizing gas, and that the layer has from 1% to 50% carbon by atomic weight. The Examiner asserts that Shu remedies the deficiencies of

Chiang by teaching use of a plasma enhanced process, methylsilane precursors, and oxidizing gases. Applicant respectfully traverses the rejection.

Shu is not prior art with respect to the claimed invention. Application 09/019,900, Shu, et al., is an abandoned application. Two later applications, 09/334,288 and 09/982,419 claim priority to 09/019,900. These two later applications were patented (U.S. 6,348,421, hereinafter "'421,'" and U.S. 6,593,615, hereinafter "'615,'" respectively) on February 1, 2002, and June 26, 2003, respectively. Because application 09/019,900 was not separately published or patented as required by 35 U.S.C. § 102(e), any subject matter in 09/019,900 must be deemed published under 35 U.S.C. § 102(a) as of the date any application disclosing the same subject matter and claiming priority to 09/019,900 is published (*see* MPEP § 2127.I). Thus, Shu published after the effective filing date of the present application.

Applicant further notes that the subject matter in 09/019,900 used to reject the present claims is not disclosed in the later patents, '421 and '615. Thus, the Examiner cannot correct the error by rejecting the claims in view of the issued patents. Withdrawal of the rejection is respectfully requested.

Claim 22 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chiang* ('572) in view of *Shu* ('900) as applied to claims 15-18, 21 and 23-28 above, and further in view of *Chen* (U.S. Pat. No. 5,970,376). Applicant respectfully traverses the rejection.

As discussed above, Shu is not prior art with respect to the present claims. Withdrawal of the rejection is respectfully requested.

In conclusion, the references cited by the Examiner do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the Final Office Action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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